**Proposal**

**Title:** Predicting the Likelihood of Loan Defaults

**Problem Statement**

What opportunities exist for LendingClub to mitigate losses on defaults on personal loans?

**Context**

LendingClub is an online lending service that provides various financial products and services. The company has attracted over 4.7 million members over the course of 16 years, with the aim of lowering borrowing costs and increasing savings returns to its clients. Defaults are always a risk to consider for lenders when it comes to providing loans and are a huge liability to both the lenders and borrowers. According to LendingTree, 22.7 million Americans owe a collective $232 billion in personal loans, more than double the $117 billion owed in 2017. The increase in debt means more exposure to defaults, putting lenders at risk of substantial losses while affecting borrowers’ credit ratings and jeopardizing their ability to secure loans in the future. The aim of the project will be to create a model that will predict the likelihood of a borrower defaulting on a loan by utilizing the anonymized data provided by LendingClub.

**Criteria for Success**

The condition for a successful project is creating a model that accurately predicts the likelihood of a borrower defaulting on a loan.

**Constraints**

A potential constraint is the possibility of important features not being reflected in the data that could be factors leading to borrowers defaulting on loans. This constraint could lead to inaccuracies in the prediction of the model.

**Key Data Sources**

The main data source for the project will be LendingClub’s anonymized personal loan data which includes whether borrowers have defaulted on their loan as well as other features that could be used to predict default such as inquiries in the last 6 months, interest rates, debt-to-income ratios, and more.

**Deliverables**

1. Notebooks containing:
   1. Data Wrangling
   2. Exploratory Data Analysis
   3. Pre-Processing & Training Development
   4. Modeling
2. Report on the project
3. Presentation on the project